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Jack E. Caveney

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EXAMINER

DUONG, THOMAS

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,034

Applicant(s)

CAVENEY, JACK E.

Examiner

Thomas Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Amendment received July 24, 2006 has been entered into record. *Claims 1-29* remain pending.

Response to Amendment

3. This office action is in response to the applicants Amendment filed on July 24, 2006. Applicant amended *claims 1, 13, and 21* and added *claims 26-29*. *Claims 1-29* are presented for further consideration and examination.

Specification

4. The disclosure is objected to because of the following informalities.

Applicant discloses the following indefinite terms in the specification:

- "may display"
- "disposed proximately thereto"
- "may be placed"

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- "disposed proximately"
- "approximate"

The terms specified above found in the specification are relative terms which render the specification indefinite. The term above are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Please clarify the language of the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-2, 5-6, 10, 18, and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With regards to claims 1-2, 5-6, 10, 18, and 22-24, Applicant recites the limitations,

- "disposed physically proximate" (claim 1)
- "may display" (claim 1 and 23)
- "disposed proximately thereto" (claims 2, 6, 10, 18, and 22)
- "may be placed" (claims 5 and 24)
- "disposed proximately" (claim 23)

The terms specified in the above claims are relative terms which render the claims indefinite. The term above are not defined by the claims, the specification does not

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provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Please clarify the language of the above claims.

8. Claims 11 and 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. With regards to claim 11, Applicant recites the limitation,

- *"at an end of said patch cord"*

There is insufficient antecedent basis for the limitation of *"said patch cord"* in the claim. There is no mention of a *"patch cord"* in order to provide antecedent basis for *"said patch cord"*.

10. With regards to claim 26-27, Applicant recites the limitation,

- *"further comprising targeting at least one of a scan or analysis of scan results to obtain information regarding the status of said revision system."*

There is insufficient antecedent basis for this limitation in the claims. There is no mention of a scanning step in *claims 21 and 25* to provide antecedent basis for the limitation of *"at least one of a scan or analysis of scan results"*.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-4, 23, 25, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Krupka et al. (US005483467A).

13. With regard to claim 1, Krupka discloses,

- a computer processor; (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated controller for communicating with the distribution panel.

- a scanner in communication with said computer processor, said scanner capable of polling at least some of said data ports for determining information therefrom; (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"*

(Krupka, col.6, lines 56-65). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *a plurality of local system ports disposed at distinct physical locations within said system, said local system ports in communication with said computer processor; and (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)*

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated controller for communicating with the distribution panel via the plurality of computer ports 16 (i.e., Applicant's local system ports).

- *at least one visual indicator corresponding to and disposed physically proximate to at least a plurality of said data ports, whereby when one of said data ports is placed in communication with one of said local system ports, said visual indicator corresponding to said data port may display information about said corresponding data port. (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)*

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, the apparatus for automatically providing an indication of the connection pattern comprises: ... output apparatus, coupled to the apparatus for*

identifying, for providing an output indication of the connection pattern" (Krupka, col.1, lines 42-58). Hence, Krupka teaches of an output apparatus, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern, which indicates information regarding an established connection between the computer port and the user port.

14. With regard to claims 2-4 and 29, Krupka discloses,

- *wherein said plurality of data ports are distributed over and disposed upon a plurality of network racks and each of said racks includes at least one local system port disposed proximately thereto.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). In addition, Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"* (Krupka, col.6, lines 56-65). Hence, Krupka teaches of an arrangement of the distribution panel, which includes computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *wherein said scanner periodically polls all of said data ports in said system.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"*

(Krupka, col.6, lines 56-65). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *wherein said scanner polls at least said data port in communication with said local system port while said data port and local system port are in communication with each other.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, the apparatus for automatically providing an indication of the connection pattern comprises: ... output apparatus, coupled to the apparatus for identifying, for providing an output indication of the connection pattern"* (Krupka, col.1, lines 42-58). Hence, Krupka teaches of an output apparatus, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern, which indicates information regarding an established connection between the computer port and the user port.

- *wherein each of said visual indicators includes a light-emitting diode.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col.8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes"* (Krupka, col.8, lines 62-66). Hence, Krupka teaches of an output apparatus being a matrix diode, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern, which indicates information regarding an established connection between the computer port and the user port.

15. With regard to claims 23 and 25, Krupka discloses,

- *a computer processor*; (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated controller for communicating with the distribution panel.

- *a port plate corresponding to each of said data ports in said system*; (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"it is seen that frames 76 typically include a plurality of parallel plates 82 and typically two coils 78 are associated with each frame 76"* (Krupka, col. 8, line 66 – col.9, line 1). Hence, Krupka the distributive panel containing plurality of computer ports 16 (i.e., Applicant's local system ports), user ports 20

(i.e., Applicant's data ports), and their respective parallel plates (i.e., Applicant's port plate).

- *a scanner in communication with said computer processor, said scanner capable of polling at least some of said port plates for determining information therefrom;* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"*

(Krupka, col.6, lines 56-65). In addition, Krupka discloses, *"it is seen that frames 76 typically include a plurality of parallel plates 82 and typically two coils 78 are associated with each frame 76"* (Krupka, col. 8, line 66 – col.9, line 1). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports) via their respective plates (i.e., Applicant's port plate).

- *a plurality of local system ports disposed at distinct physical locations within said system, said local system ports in communication with said computer processor;* and (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM*

3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18" (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated controller for communicating with the distribution panel via the plurality of computer ports 16 (i.e., Applicant's local system ports).

- *at least one visual indicator corresponding to and disposed proximately to at least a plurality of said port plates, whereby when one of said port plates is placed in communication with one of said local system ports, said visual indicator corresponding to said port plate may display information about said corresponding port plate.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, the apparatus for automatically providing an indication of the connection pattern comprises: ... output apparatus, coupled to the apparatus for identifying, for providing an output indication of the connection pattern"* (Krupka, col.1, lines 42-58). In addition, Krupka discloses, *"it is seen that frames 76 typically include a plurality of parallel plates 82 and typically two coils 78 are associated with each frame 76"* (Krupka, col. 8, line 66 – col.9, line 1).

Furthermore, Krupka discloses, *"a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes"* (Krupka, col.8, lines 62-66). Hence, Krupka teaches of an output apparatus being a matrix diode, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern,

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which indicates information regarding an established connection between the computer port and the user port via their respective plates (i.e., Applicant's port plate).

16. Claims 13-17, 21, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kahkoska (US006629269B1).
17. With regard to claims 13 and 21, Kahkoska discloses,
- *a system port connector for enabling connection with respective ones of said local system ports; (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)*
- Kahkoska discloses, *"in accordance with the invention, a hand held network test instrument is adapted to be positioned inline between a PC and the network. The instrument thereby analyzes and reports the configuration and status of the PC and the network connection"* (Kahkoska, col.1, lines 56-60). In addition, Kahkoska discloses, *"left and right connectors 22 and 24 are provided at left and right sides of the case, suitably comprising RJ45 female connectors, to interface to a personal computer (PC) and the network, for example, via connection with cables having corresponding male RJ45 connectors"*. Hence, Kahkoska teaches of an instrument for assisting the user in diagnosing configuration and cabling issues with connections to a network via interfaces to a PC (i.e., Applicant's data port) and the network (i.e., Applicant's system port).

- *a data port connector for enabling connection with respective ones of said data ports; and (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)*

Kahkoska discloses, *"in accordance with the invention, a hand held network test instrument is adapted to be positioned inline between a PC and the network.*

The instrument thereby analyzes and reports the configuration and status of the PC and the network connection" (Kahkoska, col.1, lines 56-60). In addition,

Kahkoska discloses, *"left and right connectors 22 and 24 are provided at left and right sides of the case, suitably comprising RJ45 female connectors, to interface to a personal computer (PC) and the network, for example, via connection with cables having corresponding male RJ45 connectors"*. Hence, Kahkoska teaches of an instrument for assisting the user in diagnosing configuration and cabling issues with connections to a network via interfaces to a PC (i.e., Applicant's data port) and the network (i.e., Applicant's system port).

- *an indicator for conveying information to the user when the system port connector is connected to at least one of the local system ports and the data port connector is connected to at least one of the data ports, the information regarding the status of the revision system. (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)*

Kahkoska discloses, *"above the center line is a display 20, suitably a backlit LCD display"* (Kahkoska, col.3, lines 6-7). In addition, Kahkoska discloses, *"the top 1/3 of display 20 is suitably aligned with the left and right connectors, to provide a physical association with the information displayed thereon and the two connectors 22, 24"* (Kahkoska, col.3, lines 12-15). Furthermore, Kahkoska

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discloses, *"suitably, indicators 26, 28, 30 and 32 comprise tri-color LEDs, indicators 26 and 28 representing link (green), collisions (yellow) and errors (red). Indicators 30 and 32 suitably represent utilization"* (Kahkoska, col.3, lines 21-25). Hence, Kahkoska teaches of indicators for displaying information regarding the connection status between the personal computer and the network.

18. With regard to claims 14-17, Kahkoska discloses,

- *wherein said indicator includes a visual indicator.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)
- *wherein said visual indicator includes a light-emitting diode.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)
- *wherein said visual indicator includes a liquid crystal display.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)
- *wherein said visual indicator includes a color display screen.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)

19. With regard to claim 26, Kahkoska discloses,

- *further comprising targeting at least one of a scan or analysis of scan results to obtain information regarding the status of said revision system.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)

Kahkoska discloses, *"in accordance with the invention, a hand held network test instrument is adapted to be positioned inline between a PC and the network. The instrument thereby analyzes and reports the configuration and status of the PC and the network connection"* (Kahkoska, col.1, lines 56-60). In addition,

Kahkoska discloses, *"in operation, data is received independently by receivers 38 and 42, for analysis to observe both the PC side and the Network side of data traffic"* (Kahkoska, col.3, lines 49-51). Hence, Kahkoska teaches of an instrument for assisting the user in diagnosing configuration and cabling issues with connections to a network via interfaces to a PC (i.e., Applicant's data port) and the network (i.e., Applicant's system port). In addition, the network instrument also analyzes the traffic data and reports the result to the user via the display.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 5-12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krupka et al. (US005483467A) and in view of Smith et al. (US005583874).

22. With regard to claims 5 and 24, Krupka discloses,

- a computer processor; (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a*

plurality of computer ports 16 forming part of a distribution panel 18" (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated controller for communicating with the distribution panel.

- *a scanner in communication with said computer processor, said scanner capable of polling at least some of said data ports for determining information therefrom;* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"* (Krupka, col.6, lines 56-65). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *a plurality of local system ports disposed at distinct physical locations within said system, said local system ports in communication with said computer processor; and* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). Hence, Krupka teaches of a computer and the associated

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controller for communicating with the distribution panel via the plurality of computer ports 16 (i.e., Applicant's local system ports).

However, Krupka does not explicitly disclose,

- *a portable information module for connecting to respective ones of said plurality of local system ports, whereby when said portable information module is connected to one of said local system ports, said portable information module may be placed into communication with and display information about respective ones of said data ports in said system.*

Smith teaches,

- *a portable information module for connecting to respective ones of said plurality of local system ports, whereby when said portable information module is connected to one of said local system ports, said portable information module may be placed into communication with and display information about respective ones of said data ports in said system. (Smith, col.1, line 53 – col.2, line 37)*

Smith discloses, *"the teachings of the invention contemplate a portable battery operated LAN link tester device which the user can use to determine if a network problem is with his personal computer network interface or with the wiring/hub or both"* (Smith, col.1, lines 53-56). In addition, Smith discloses, *"the AUI/transceiver combination server to generate a link pulse every 100 milliseconds and send it via the PC jack to any personal computer network interface connected to the PC jack or via the hub jack to any hub connected to the hub jack"* (Smith, col.1, lines 61-65). Hence, Smith teaches of allowing the user to connect the LAN link tester to either the PC or hub via the tester's PC jack or hub jack, respectively to test the connection or link of the devices and

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provide feedback to the user via the indicators. In this particular case, the user can use the LAN link tester to test the connection between the end user computer, which is attached to the user port (i.e., Applicant's data port) and the computer port (i.e., Applicant's system port). This is done by connecting a test cable between the computer port of the distributive panel and the PC jack of the LAN link tester.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Smith with the teachings of Krupka to provide a simple network link tester which a user can use *"to determine if the problem is with his or her computer or the wiring/hub"*. (Smith, col.1, lines 48-49). Furthermore, the combination of the teachings of Smith and Krupka provide for a very useful device by making it compact and portable helping the administrators tremendously in troubleshooting the network.

23. With regard to claims 6-8, Krupka and Smith disclose,

- *wherein said plurality of data ports are distributed over and disposed upon a plurality of network racks and each of said racks includes at least one local system port disposed proximately thereto.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"the computer system comprises a main computer 10, such as an IBM mainframe, which is coupled, typically via a controller 12, such as IBM 3270, and local area network cabling 14, typically type I, ICS cabling, to a plurality of computer ports 16 forming part of a distribution panel 18"* (Krupka, col.6, lines 40-44). In addition, Krupka discloses, *"in accordance with a preferred*

embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20" (Krupka, col.6, lines 56-65). Hence, Krupka teaches of an arrangement of the distribution panel, which includes computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *wherein said system further includes a second portable information module for connecting to respective ones of said plurality of local system ports, wherein when said second module is connected to one of said local system ports, said second module may be placed into communication with and display information about respective ones of said data ports in said system, said second module being able to function on said revision system simultaneously with said other portable information module.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

- *wherein said scanner periodically polls all of said data ports in said system.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"* (Krupka, col.6, lines 56-65). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer

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ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

24. With regard to claims 9-10, Krupka and Smith disclose,

- *wherein said scanner polls at least said data port connected to said portable information module upon connection of said portable information module with said connected data port.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"in accordance with a preferred embodiment of the present invention, a scanner 30 is provided for automatically and preferably, continuously sensing the interconnection arrangement of the patching cables and thus the interconnection status of the various computer ports 16 and user ports 20"* (Krupka, col.6, lines 56-65). Hence, Krupka teaches of a scanner that continuously sensing (i.e., Applicant's polling) of the interconnection arrangement of the distribution panel, including the interconnection status of the computer ports 16 (i.e., Applicant's local system ports) and user ports 20 (i.e., Applicant's data ports).

- *wherein at least one of said data ports includes a port plate disposed proximately thereto.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; fig.1A-1B)

Krupka discloses, *"a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes"* (Krupka, col.8, lines 62-66). In addition, Krupka discloses, *"it is seen that frames 76*

typically include a plurality of parallel plates 82 and typically two coils 78 are associated with each frame 76" (Krupka, col. 8, line 66 – col.9, line 1).

Hence, Krupka teaches of an output apparatus being a matrix diode, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern, which indicates information regarding an established connection between the computer port and the user port via their respective plates (i.e., Applicant's port plate).

25. With regard to claims 11-12, Krupka and Smith disclose,

- *wherein one of said data ports includes a patch cord plug inserted therein, said patch cord plug disposed at an end of said patch cord and including a plug extension for contacting said port plate when said patch cord plug is inserted in said data port.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col.8, lines 44-61; fig.1A-1B; fig.3)

Krupka discloses, *"the patch cable 26 is shown with connectors 70 and 72 adapted for connection to the user port 20 and the computer port 16"* (Krupka, col.8, lines 46-48). In addition, Krupka discloses, *"in this manner, coupler 75 of port 20 is operative to impose a signal onto patch cable 26, if connected to port 20, and coupler 75 of port 16 is operative to pick up such signal on patch cable 26, if a patch cable 26 is coupled to port 16"* (Krupka, col.8, lines 57-61). Hence, Krupka teaches a patch cord used to connect the user port with the computer port through the connectors, which make contact with the couplers of the respective ports via the parallel plates.

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- wherein said patch cord plug includes a plug plate thereon, said plug plate being connectable to said portable information module. (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col.8, lines 44-61; fig.1A-1B; fig.3)

Krupka discloses, “the patch cable 26 is shown with connectors 70 and 72 adapted for connection to the user port 20 and the computer port 16” (Krupka, col.8, lines 46-48). In addition, Krupka discloses, “in this manner, coupler 75 of port 20 is operative to impose a signal onto patch cable 26, if connected to port 20, and coupler 75 of port 16 is operative to pick up such signal on patch cable 26, if a patch cable 26 is coupled to port 16” (Krupka, col.8, lines 57-61). Hence, Krupka teaches a patch cord used to connect the user port with the computer port through the connectors, which make contact with the couplers of the respective ports via the parallel plates.

26. Claims 18-20, 22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahkoska (US006629269B1) and in view of Krupka et al. (US005483467A).

27. With regard to claims 18 and 22, Kahkoska discloses,

See *claims 13 and 21* rejection as detailed above.

However, Kahkoska does not explicitly disclose,

- wherein one of said data ports includes a patch cord plug inserted therein, said patch cord plug disposed at an end of said patch cord and including a plug extension for contacting said port plate when said patch cord plug is inserted in said data port.

Krupka teaches,

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- *wherein at least one of said data ports includes a port plate disposed proximately thereto.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes"* (Krupka, col.8, lines 62-66). In addition, Krupka discloses, *"it is seen that frames 76 typically include a plurality of parallel plates 82 and typically two coils 78 are associated with each frame 76"* (Krupka, col. 8, line 66 – col.9, line 1).

Hence, Krupka teaches of an output apparatus being a matrix diode, which is coupled to the apparatus (i.e., distribution panel), for providing an output indication of the connection pattern, which indicates information regarding an established connection between the computer port and the user port via their respective plates (i.e., Applicant's port plate).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Krupka with the teachings of Kahkoska *"to provide an improved network test instrument that is adapted to operate inline between a PC NIC and a network"* (Kahkoska, col.1, lines 62-63), in addition to *"[determining and reporting] link pulse configuration problems and cabling problems"* (Kahkoska, col.1, lines 65-67). Furthermore, the combination of the teachings of Krupka and Kahkoska provide for a very useful device by making it compact and portable helping the administrators tremendously in troubleshooting the network.

28. With regard to claims 19 and 28, Kahkoska discloses,

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See *claims 13 and 21* rejection as detailed above.

However, Kahkoska does not explicitly disclose,

- *wherein at least one of said data ports includes a port plate disposed proximately thereto.*

Krupka teaches,

- *wherein one of said data ports includes a patch cord plug inserted therein, said patch cord plug disposed at an end of said patch cord and including a plug extension for contacting said port plate when said patch cord plug is inserted in said data port.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"the patch cable 26 is shown with connectors 70 and 72 adapted for connection to the user port 20 and the computer port 16"* (Krupka, col.8, lines 46-48). In addition, Krupka discloses, *"in this manner, coupler 75 of port 20 is operative to impose a signal onto patch cable 26, if connected to port 20, and coupler 75 of port 16 is operative to pick up such signal on patch cable 26, if a patch cable 26 is coupled to port 16"* (Krupka, col.8, lines 57-61).

Hence, Krupka teaches a patch cord used to connect the user port with the computer port through the connectors, which make contact with the couplers of the respective ports via the parallel plates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Krupka with the teachings of Kahkoska *"to provide an improved network test instrument that is adapted to operate inline between a PC NIC and a network"* (Kahkoska, col.1, lines 62-63), in addition to *"[determining and reporting] link pulse configuration problems and cabling problems"*

(Kahkoska, col.1, lines 65-67). Furthermore, the combination of the teachings of Krupka and Kahkoska provide for a very useful device by making it compact and portable helping the administrators tremendously in troubleshooting the network.

29. With regard to claim 20, Kahkoska discloses,

See *claims 13* rejection as detailed above.

However, Kahkoska does not explicitly disclose,

- *wherein said patch cord plug includes a plug plate thereon, said plug plate being connectable to said portable information module.*

Krupka teaches,

- *wherein said patch cord plug includes a plug plate thereon, said plug plate being connectable to said portable information module.* (Krupka, col.1, line 31 – col.5, line 58; col.6, lines 37-65; col. 8, line 62 – col.9, line 11; fig.1A-1B; fig.4-5)

Krupka discloses, *"the patch cable 26 is shown with connectors 70 and 72 adapted for connection to the user port 20 and the computer port 16"* (Krupka, col.8, lines 46-48). In addition, Krupka discloses, *"in this manner, coupler 75 of port 20 is operative to impose a signal onto patch cable 26, if connected to port 20, and coupler 75 of port 16 is operative to pick up such signal on patch cable 26, if a patch cable 26 is coupled to port 16"* (Krupka, col.8, lines 57-61).

Hence, Krupka teaches a patch cord used to connect the user port with the computer port through the connectors, which make contact with the couplers of the respective ports via the parallel plates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Krupka with the teachings of

Kahkoska *"to provide an improved network test instrument that is adapted to operate inline between a PC NIC and a network"* (Kahkoska, col.1, lines 62-63), in addition to *"[determining and reporting] link pulse configuration problems and cabling problems"* (Kahkoska, col.1, lines 65-67). Furthermore, the combination of the teachings of Krupka and Kahkoska provide for a very useful device by making it compact and portable helping the administrators tremendously in troubleshooting the network.

30. Claim 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krupka et al. (US005483467A) and in view of Kahkoska (US006629269B1).

31. With regard to claim 27, Krupka discloses,

See *claim 25* rejection as detailed above.

However, Krupka does not explicitly disclose,

- *further comprising targeting at least one of a scan or analysis of scan results to obtain information regarding the status of said revision system.*

Kahkoska teaches,

- *further comprising targeting at least one of a scan or analysis of scan results to obtain information regarding the status of said revision system.* (Kahkoska, col.1, line 56 – col.2, line 23; col.2, line 55 – col.3, line 60; fig.1-2)

Kahkoska discloses, *"in accordance with the invention, a hand held network test instrument is adapted to be positioned inline between a PC and the network.*

The instrument thereby analyzes and reports the configuration and status of the PC and the network connection" (Kahkoska, col.1, lines 56-60). In addition,

Kahkoska discloses, *"in operation, data is received independently by receivers*

38 and 42, for analysis to observe both the PC side and the Network side of data traffic" (Kahkoska, col.3, lines 49-51). Hence, Kahkoska teaches of an instrument for assisting the user in diagnosing configuration and cabling issues with connections to a network via interfaces to a PC (i.e., Applicant's data port) and the network (i.e., Applicant's system port). In addition, the network instrument also analyzes the traffic data and reports the result to the user via the display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Krupka with the teachings of Kahkoska "to provide an improved network test instrument that is adapted to operate inline between a PC NIC and a network" (Kahkoska, col.1, lines 62-63), in addition to "[determining and reporting] link pulse configuration problems and cabling problems" (Kahkoska, col.1, lines 65-67). Furthermore, the combination of the teachings of Krupka and Kahkoska provide for a very useful device by making it compact and portable helping the administrators tremendously in troubleshooting the network.

Response to Arguments

32. Applicant's arguments with respect to *claim 1* have been considered but they are not persuasive.
33. With regard to *claim 1*, the Applicant point out that:
- *Claim 1 recites a revision system that comprises, inter alia, data ports, local system ports, and visual indicators. When one of the data ports is placed in communication with one of the local system ports, a visual indicator*

corresponding to the data port may display information about the data port. At least a first of the visual indicators is disposed in physical proximity to a first data port and at least a second of the visual indicators is disposed in physical proximity to a second data port.

However, the Examiner finds that the Applicants' arguments are not persuasive because the presented argument does not commensurate with the claimed language of *claim 1*.

34. With regard to *claim 1*, the Applicant point out that:

- *Thus, Krupka teaches only that a lone output device displays an indication of the connection pattern determined by the scanner 30.*
- *Nowhere does Krupka disclose that multiple visual indicators are present. Nor does Krupka specifically teach an arrangement in which, of the multiple visual indicators, at least one visual indicator corresponds to a different data port than another visual indicator, as recited in Claim 1.*

However, the Examiner finds that the Applicants' arguments are not persuasive because Krupka discloses, "a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes" (Krupka, col.8, lines 62-66). Hence, Krupka teaches of output apparatuses being matrix diodes, which are coupled to the apparatus (i.e., distribution panel), for providing output indications of the connection patterns, which indicate information regarding established connections between the respective computer ports and the user ports.

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In addition, as disclosed in figure 4, each of the computer ports 16 and user ports 20 includes its own inductive coupler and the wiring thereto including the matrix diode.

35. With regard to claim 1, the Applicant point out that:

- *Further, Krupka does not disclose the physical location of the output device. Nor does Krupka disclose the relationship between the physical location of the output device and the ports.*

However, the Examiner finds that the Applicants' arguments are not persuasive because Krupka discloses, "*a preferred embodiment of part of a distribution panel 18 including a plurality of ports 16 or 20 together with their inductive couplers 75 and the wiring thereto including matrix diodes 80, such as 1N4148 diodes*" (Krupka, col.8, lines 62-66). Hence, Krupka teaches of output apparatuses being matrix diodes, which are coupled to the apparatus (i.e., distribution panel), for providing output indications of the connection patterns, which indicate information regarding established connections between the respective computer ports and the user ports. In addition, as disclosed in figure 4, each of the computer ports 16 and user ports 20 includes its own inductive coupler and the wiring thereto including the matrix diode, which is clearly situated beside its respective port.

36. Applicant's arguments with respect to *claims 5, 13, and 21* have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

Thomas Duong (AU2145)

September 27, 2006



Jason D. Cardone

Supervisory PE (AU2145)